- 72. (New Pending). The method of claim 70 and wherein the step of controlling and coordinating distribution of power comprises preventing a voltage increasing means from receiving power from the voltage supply.
- 73. (New Pending). The method of claim 70 and further including preventing the system control from accepting a signal from the trigger generated by actuation of the trigger when the safety mechanism of the firearm is in a safe position.
- 74. (New Pending). The method of claim 70 and wherein controlling and coordinating distribution of power to the firing pin includes increasing voltage in a voltage increasing means.

#### REMARKS

Applicants gratefully acknowledge with thanks the interview held between applicant's counsel and Examiner Charles Jordan on October 3, 2000, to discuss the details of the Official Action, the question of the inapplicability of the recapture rule in this case, as well as the prior art raised in the Official Action. Applicants appreciate the guidance provided by Examiner Jordan in the interview as to making responses/corrections to the application for reissue of the '056 patent in compliance with the rules and procedures for reissues under 37 CSR §§ 1.121 and 1.172 et seq. and MPEP § 1410 et seq. Applicants accordingly now have amended the claims in accordance with the suggestions of the Official Action and as discussed with Examiner Jordan

and their responses to objections and rejections of the claims raised in the Official Action, as discussed with Examiner Jordan, are set forth below.

Original claims 1 - 9 and 11- 40, as amended above, remain pending in the reissue application. Original claim 10 has now been cancelled. New claims 41-74 have been added to and are now pending in the present Application for Reissue Patent in accordance with the provisions of 37 C.F.R. § 1.173 and MPEP § 1453. (37 C.F.R. § 1.121(b)(2)(ii)). The pending claims of this application therefore are now original claims 1-9 and 11-40, as now amended, and new claims 41-74.

Pursuant to 37 C.F.R. §§ 1.121(b)(1) and 1.173, amendments to the specification have been made as noted above. These amendments to the specification have made to clarify the description of the present invention in which is applicable to any type of electronic firearm. No new matter has been added.

Pursuant to 37 C.F.R. 1.173 and MPEP §1411, a cut up copy of the patent as issued, with only a single Column of the patent mounted to a sheet of paper was previously submitted with the Application for Reissue Patent as filed.

As discussed with Examiner Jordan, pursuant to 37 CFR 1.178, Applicants offer to surrender the original patent, or submit a declaration as to the loss or inaccessibility of the original patent.

#### A. Claim Amendments

Pursuant to the provisions of 37 C.F.R. § 1.121(b)(2)(iii), Applicants hereby identify support for the amendments made to original, pending Claims 1, 2, 14, 19 – 21, 25, 30, 38, 39 and

40, and new, pending claims 41 - 74 of the reissue application as set forth in the specification of the above-identified patent:

Claim 1 has been amended to remove the discussion in the preamble of the movable bolt assembly, voltage increasing means, means for electronically detecting the presence of a round ammunition within the chamber of the barrel, means for monitoring the capacity of the voltage supply means, and the discussion of the firing pin including forward conductive end and a rearward conductive area. This language was originally present in the claims of the '056 patent as issued, specifically original claim 1, which therefore provides necessary support for this amendment, but was not required for patentability of the claims over the cited art. Additional support for claim 1 is found in the discussion in the specification given at Column 7, Line 1 - Column 8, Line 57.

Claim 2 has been amended to affirmatively claim a bolt assembly as an additional limitation to further define the invention recited by Claim 1, as now amended. Support for this amendment is found in original claims 1-2 of the `056 patent as issued, and in the specification and drawings, including at Column 7, Lines 1-21 and Column 8, Line 23-44.

Claim 14, as now amended, claims a means for electronically detecting the presence of a round of ammunition within the chamber of the barrel. Support for this amendment is found in claims 1 and 14 of the '056 patent as issued, and in the specification at Column 7, Lines 54-56, Column 8, Lines 3-15, and Column 11, Lines 32-57.

Claims 19 and 21 have been amended to correct minor defects raised in the Official Action with regard to the rejection of the claims under 35 U.S.C. Section 112, second paragraph, while claim 20 has been amended to correct a minor claim dependency error in Claim 20 as issued. Claims 19, 20 and 21, as now amended, claim an electrical isolation means, with claim 19 claiming

a modification of surface of the firing pin, claim 20 claiming the modification as comprising ion implantation, while with regard to claim 21, the electrical isolation means is stated as comprising an insulating coating. Support for these claims, as amended, is found in claims 19, 20 and 21 of the '056 patent as issued, as well as being shown in the drawings and discussed in the specification at Column 10, Lines 35-59.

Claim 25, as amended, claims a means for isolating the firing pin including an insulative sleeve about the firing pin. Support for this claim is found in claim 25 of the '056 patent as issued and in the specification at Column 10, Lines 35-59.

Claim 30 has been amended to claim an electronic safety operatively connected to the safety mechanism of the firearm. Support for this language is found in original claims 1 and 30 of the `056 patent, as issued, and in the specification at Column 2, Lines 9-13, Column 4, Lines 24 - 45.

Claim 38 has been amended in similar fashion to claim 1 to delete the discussion of the movable bolt assembly, the step of increasing the voltage from the voltage supply means, electronically detecting the presence of ammunition within the chamber, monitoring the capacity of the voltage supply means, and indicating the status for the firearm. Support for these amendments can be found in original claim 38 of the '056 patent as issued and in the specification of the patent at Column 2, Lines 28-63 and Column 3, Line 54-Column 6, Line 48.

Claim 39 has been amended to further claim the method of claim 38, including detecting the presence of a round of ammunition in the chamber. Support for this claim can be found in original claim 38 of the '056 patent as issued, and in the specification at Column 7, Lines 54-56, Column 8, Lines 3-15 and Column 11, Lines 32-57.

Claim 40, as amended, claims the method of claim 38, including indicating the status of the firearm. Support for this claim is found in original claim 38 of the '056 patent as issued and in the drawings and the specification at Column 2, Line 62, and Column 4, Lines 5 – 23.

New claim 41 claims a means for electronically detecting the presence of a round of ammunition within the chamber of the barrel. Support for this claim is found in claims 1 and 14 of the '056 patent as issued, and in the specification at Column 7, Lines 54-56, Column 8, Lines 3-15 and Column 11, Lines 32-57.

New claim 42 claims the method of claim 38, further including the step of monitoring the capacity of the voltage supply means. Support for this claim is found in claim 38 of the '056 patent as issued and in the specification at Column 3, Lines 28-63, Column 4, Lines 5-10 and Column 5, Line 35 - Column 6, Line 12.

New claim 43 claims the method or process recited by claims 38, with the additional step of preventing voltage from reaching the firing pin when the safety is in a safe position. Support for this claim is found in claim 38 of the '056 patent as issued, and in the specification of the '056 patent at Column 2, Lines 10-14 and 28-63, and Column 4, Lines 46 – Column 5, Line 16.

New claim 44 claims the process of claim 38, including preventing the system control from accepting a signal from the trigger assembly generated by an actuation of the trigger assembly when the safety is in a safe position. Support for this claim is found in claim 38 of the '056 patent as issued and in the specification at Column 2, Lines 28-63 and Column 4, Lines 5-65.

New claim 45 claims an indicator communicating with the system control means. Support for this claim is found in claim 1 of the '056 patent as issued, in the specification at Column 2, Lines 27-28, Column 4, Lines 10 –23, and Column 7, Lines 27-40, and in the drawings.

New claim 46 claims a firing pin having a forward conducting end for transmitting voltage to a round of ammunition and a rearward conductive area movable into a position to receive the voltage. Support for this claim is found in claim 1 of the '056 patent as issued and in the specification at Column 2, Lines 19-26 and at Column 9, Lines 14-22, Column 10, Lines 9 - 61 and in the drawings.

New claim 47 claims an electronic firearm having a barrel, chamber, firing pin, a voltage supply supplying power to the firing pin for firing a round of ammunition, and a system control for monitoring the firearm and controlling the power supply to the firing pin, and including a means for isolating the firing pin from the voltage supply to prevent firing pin from receiving power from the voltage supply, and a trigger for signaling the system control to initiate firing of a round of ammunition. Support for this claim is found in claim 1 of the '056 patent as issued, as well as in the drawings and in the specification at Column 1, Lines 35 – Column 2, Line 27 and Column 7, Line 1 – Column 8, Line 57.

New claims 48 claims a voltage increasing means for increasing voltage received from a voltage supply to a voltage sufficient to initiate the firing of the round of ammunition. Support for this claim is found in claim 1 of the '056 patent as issued in the specification at Column 1, Lines 55-56 and in Column 7, Line 54 – Column 8, Line 2, and in the drawings.

New claim 49 claims the switching means as isolating the voltage supply from the voltage increasing means. Support for this claim is found in claim 1 of the '056 patent as issued and in the specification at Column 1, Lines 58 - 62, and Column 12, Lines 20 - 35.

New claim 50 claims the switching means as isolating the voltage increasing means from the firing pin. Support for this claim is found in claim 1 of the '056 patent as issued and in the specification at Column 1, Lines 58 - 63 and Column 12, Lines 20 - 35.

New claim 51 claims an indicator communicating with the system control means. Support for this claim is found in claim 1 of the '056 patent as issued, in the specification at Column 2, Lines 27-28, Column 4, Lines 10 –23, and Column 7, Lines 27-40, and in the drawings.

New claim 52 claims a system authorization switch for controlling access to the firearm. Support for this claim is found in claims 28 and 29 of the '056 patent as issued, in the specification at Column 3, Line 63 – Column 4, Line 4 and Column 7, Lines 29-30, and in the drawings.

New claim 53 claims an insulating coating about the firing pin of the fir earm. Support for this claim is found in claim 21 of the '056 patent as issued, in the drawings and in the specification at Column 10, Line 35-61.

New claim 54 claims a means for isolating the firing pin of the firearm, including an insulative sleeve mounted about the firing pin. Support for this claim is found in claim 25 as issued in the '056 patent, in the drawings and in the specification at Column 10 Lines 35-61.

New claim 55 claims a firearm safety mechanism and an electronic safety operatively connected to the firearm safety mechanism, adapted to isolate the firing pin when the firearm safety is in a safe position by rejecting signals received from the trigger. Support for this claim is found in claim 1 in the '056 patent as issued, in the specification at Column 1, Line 30 – Column 2, Line 13, and in the drawings.

New claim 56 claims a means for electronically detecting the presence of a round of ammunition within the chamber of the barrel. Support for this claim is found in claims 1 and 14

of the '056 patent as issued, and in the specification at Column 7, Lines 54-56, Column 8, Lines 3-15 and Column 11, Lines 32-57.

New claim 57 claims a firearm safety mechanism movable between a fire and safe position for placing the firearm in a nonoperative condition. Support for this claim is found in the drawings of the '056 patent and in claim 1 of the '056 patent as issued. Additional support is found in the specification at Column 1, Lines 48-49.

New claim 58 claims the system controller including programming for performing an operational sequence to monitor and control the firearm, including initiating a sleep mode for the firearm. Support for this claim is found in the specification at Column 3, Lines 38-45 and Column 11, Lines 20-30.

New claim 59 claims the system controller comprising at least a microprocessor, microcontroller, software, firmware, microcode, digital logic, analog logic, or custom integrated logic. Support for this claim is found in claim 7 of the '056 patent as issued and in the specification at Column 3, Lines 37-41.

New claim 60 claims an electronic firearm having a barrel, chamber, firing pin, a voltage supply supplying power to the firing pin for firing a round of ammunition, and a system control for monitoring the firearm and controlling the power supply to the firing pin, and including a means for isolating the firing pin from the voltage supply to prevent firing pin from receiving power from the voltage supply, and a trigger for signaling the system control to initiate firing of a round of ammunition. Support for this claim is found in claim 1 of the '056 patent as issued, as well as in the drawings and in the specification at Column 1, Line 35 – Column 2, Line 27 and Column 7, Line 1 – Column 8, Line 57, and in the drawings.

New claims 61 claims a voltage increasing means for increasing voltage received from a voltage supply to a voltage sufficient to initiate the firing of the round of ammunition. Support for this claim is found in claim 1 of the '056 patent as issued in the specification at Column 1, Lines 56-57 and in Column 7, Line 54 – Column 8, Line 2, and in the drawings.

New claim 62 claims the switching means being controlled by the system control means to prevent the firing pin from receiving power upon occurrence of at least one of a series of conditions. Support for this claim is found in claims 1 and 38 of the '056 patent as issued and in the specification at Column 1, Line 51 – Column 2, Line 63, Column 3, Line 55 – Column 6, Line 67 and Column 11, Lines 8-30.

New claim 63 claims a safety movable between a safe and fire position and an electronic safety connected to the safety for monitoring the safety and preventing power from being provided to the firing pin and preventing the system control means from detecting a trigger activation when in a safe position. Support for this claim is found in claim 1 of the '056 patent as issued and in the specification at Column 1, Line 30 – Column 2, Line 14.

New claim 64 claims an indicator communicating with the system control means. Support for this claim is found in claim 1 of the '056 patent as issued, in the specification at Column 2, Lines 27-28, Column 4, Lines 5 – 65, and Column 7, Lines 27-40, and in the drawings.

New claim 65 claims a firing pin having a forward conducting end for transmitting voltage to a round of ammunition and a rearward conductive area movable into a position to receive the voltage. Support for this claim is found in claim 1 of the '056 patent as issued and in the specification at Column 2, Lines 18-25 and at Column 9, Lines 14-22 and in the drawings.

New claim 66 claims an insulating coating about the firing pin of the firearm. Support for this claim is found in claim 21 of the '056 patent as issued, in the drawings and in the specification at Column 10, Line 35-61.

New claim 67 claims a means for isolating the firing pin of the firearm, including an insulative sleeve mounted about the firing pin. Support for this claim is found in claim 25 as issued in the '056 patent, in the drawings and in the specification at Column 10 Lines 35-61.

New claim 68 claims a means for electronically detecting the presence of a round of ammunition within the chamber of the barrel. Support for this claim is found in claims 1 and 14 of the '056 patent as issued, and in the specification at Column 7, Lines 54-56, Column 8, Lines 3-15 and Column 11, Lines 32-57.

New claim 69 claims a system authorization switch for controlling access to the firearm. Support for this claim is found in claims 28 and 29 of the '056 patent as issued, in the specification at Column 3, Line 63 – Column 4, Line 4 and Column 7, Lines 29-30 and in the drawings.

New claim 70 claims a method of firing a round of ammunition from an electronic firearm, including monitoring a sequence of operative conditions, sending a signal to the system control upon activation of a trigger and controlling and coordinating distribution of power to a firing pin, including isolating and preventing the firing pin from receiving power upon occurrence of any of a series of selected conditions. Support for this claim is found in claim 38 of the '056 patent as issued, and in the specification at Column 2, Lines 28-63 and Column 3, Lines 55 – Column 6, Lines 67.

ATLANTA #221389

New claim 71 claims method of claim 70 and further indicating the status of a firearm. Support for this claim is found in claim 38 in the '056 patent as issued and in the specification at Column 2, Lines 27-28 and 63, Column 4, Lines 5 – 65 and at Column 11, Lines 58 – 65.

New claim 72 claims the method of claim 70, with the step of controlling and coordinating power comprising preventing a voltage increasing means from receiving power from the voltage supply. Support for this claim is found in claim 38 of the '056 patent as issued and in the specification at Column 2, Lines 55-60, and Column 4, Line 55 – Column 5, Line 15.

New claim 73 claims the method of claim 70 and further preventing the system control means from accepting a signal from the trigger assembly generated by actuation of the trigger when the safety mechanism of the firearm is in a safe position. Support for this claim is found in claim 38 of the '056 patent as originally issued and in the specification of the '056 patent at Column 2, Lines 32 – 60 and Column 5, Lines 17–50.

New claim 74 claims the method of claim 70 and further controlling and coordinating distribution of power to the firing pin, including increasing voltage in a voltage increasing mean. Support for the claim is found in claim 38 of the '056 patent as issued and at Column 2, Lines 32-59, and at Column 7, Line 54 – Column 8, Line 2.

### **B.** Information Disclosure Statement

Applicants have previously submitted first and Supplemental Information Disclosure Statements, along with the accompanying PTO-1449 forms and copies of the cited references for review and consideration by the Examiner in the present Application for Reissue Patent. The PTO-1449 forms for these Information Disclosure Statements have been initialed by the Examiner as noted by the copies attached with the Official Action. It has now come to the

Applicants' attention that one of the patent numbers cited in the PTO-1449 forms was inadvertently mis-cited. Specifically, U.S. Patent No. 5,272,828 of Petrick, et al. was cited as U.S. Patent No. 5,727,828, although a true copy of this patent was submitted with the Information Disclosure Statement. A new PTO-1449 form correcting this mistake is submitted herewith, and it is respectfully requested that this new form be initiated and substituted in the application file wrapper.

## C. Declaration in Support of Reissue

Also attached with this amendment is a Supplemental Reissue Application Declaration signed by all of the named inventors, in support of the present application for reissue of the above-identified patent (37 C.F.R. §1.172). This Declaration supplements the previously submitted Declaration of Dale R. Danner filed with the Application for Reissue Patent and is believed to correct the cited deficiencies of the Original Declaration as set forth in the Official Action. Applicants respectfully request that this Supplemental Reissue Application Declaration be entered in this case.

#### D. Consent of Assignee

The Official Action has further objected to the reissue application as lacking the written consent of all assignees and for failure to establish the assignee's ownership interest in the patent for which reissue is being requested. Reconsideration of this objection is respectfully requested. A Consent of the Assignee of Record, Remington Arms Company, Inc., to the filing of this application for reissue patent, and a Power of Attorney appointing the undersigned as counsel of

record for the prosecution of this Application for Reissue Patent (37 C.F.R. §1.172) was filed with the Application for Reissue. The Consent was accompanied by a copy of the assignment of the application for the patent and all accompanying rights from the named joint inventors to Remington Arms Company, Inc., the current assignee of record as evidenced on the front of the '056 patent covered by this Application for Reissue. This assignment evidences the chain of title of the application from the original inventors (the original owners) to the Assignee of Record, Remington Arms Company, Inc. The consent was executed by Remington Arms Company, Inc.'s Vice President of New Business, Samuel G. Grecco, who as Vice President of New Business at Remington Arms Company, Inc. was authorized to act/sign on behalf of the assignee of record, Remington Arms Company, Inc. A copy of the Consent of Assignee, attached assignment, and the stamped postcard evidencing receipt of these materials by the Patent and Trademark Office is attached. Therefore, it is respectfully submitted that the Consent of Assignee and Power of Attorney previously submitted in this Application for Reissue Patent is in compliance with 37 CFR § 1410 and therefore this objection should be withdrawn.

### E. Drawing Objections

The drawings have been objected to under 37 CRF §1.83(a) for various cited informalities. The specification and drawings accordingly have been amended, with proposed drawing corrections being submitted herewith in red to more clearly indicate the claimed element(s) in the drawings. For example, it appears that the firearm safety, which is shown in Figs 1, 2 and 3 was inadvertently labeled with the same number, 14, as the electronic safety further recited in the specification. The specification accordingly has been amended to indicate

the safety switch as number 13, and the drawings accordingly have been corrected to reflect this minor change.

As to the switching means and switch isolation means recited in claims 1 and 47 and claim 62, respectively, claim 62 has been amended to recite the switching means, which is indicated in the specification as being part of the system control and is schematically illustrated in Fig. 3 and discussed in the specification at Column 11, Line 66 – Column 12, Line 5 and at Column 12, Lines 10-16. The specification and drawings have further been amended to add the numerals "5A" to more clearly indicate the switching means as schematically illustrated in the drawings.

With regard to the threaded pin adjustment and threaded aperture of claim 5, as indicated in Figs. 4 and 8, the firing pin plug 28 is received within firing pin 29 and includes a threaded portion, by which it is attached to the firing pin. The specification and drawings have been amended to more clearly indicate this threaded attachment at 28A and 28B. Therefore, it is respectfully submitted that claim 5 is supported in the drawings.

Additionally, as to the reference to the secondary discharge path 31, this feature generally is inherent in voltage increasing means such as inductors, diodes, capacitors and switches which typically include a secondary path shunt as discussed at Column 12, Lines 21-35, as amended, and it is commonly known to discharge a capacitor to ground to avoid unwanted discharge.

With regard to the objection to claim 10, claim 10 has now been cancelled.

Accordingly, it is respectfully submitted that the proposed corrections to the drawings and specification now illustrate more clearly in the drawings the elements recited by the claims

so that the objections under 37 CRF §1.83(a) have now been overcome. No new matter has been entered by these proposed corrections.

## F. Claim Objections/Rejections

## 1. Objections Under 35 USC § 112, First Paragraph.

Claims 47-59, 62-63 and 70-74 have been rejected under 35 USC § 112, first paragraph, as containing subject matter considered not to be described in this specification in such a way as to reasonably convey one skilled in the relevant art that the inventors at the time the application was filed, had possession of the claimed invention. The claims have now been amended to correct the cited indefiniteness and therefore are now believed to be in condition for allowance under 35 USC § 112, first paragraph.

# 2. Rejections Under 35 USC § 112, Second Paragraph.

Claims 1-37, 45-46, 49-50 and 70-74 have been rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the claimed invention. Claims 1-37, 45-46, 49-50, 59 and 70-74 have now been amended as suggested in the Official Action to correct the cited indefiniteness and therefore place these claims in condition for allowance under 35 USC § 112, second paragraph.

In addition, with regard to claim 3, lines 23 – 25 disclose the use of "a bolt plug detent spring positioned between the bolt plug and the bolt plug detent to bias the bolt plug detent forward" (emphasis added), not that the bolt plug detent biases the bolt plug detent forward.

Thus, it is respectfully submitted that claim 3 is in condition for allowance under 35 USC § 112, second paragraph.

As to claim 30, this claim is dependent from claim 1, which discloses a "safety mechanism". Similarly, claim 45 is dependent from claim 1, which discloses "the system control means". Thus, it is respectfully submitted that there is antecedent basis for the recited terms in these claims as required under 35 USC § 112, second paragraph.

With regard to claims 7 and 59, it is respectfully submitted that the term "logic" will be understood by those skilled in the art including the branch or variety of logic being either modal or boolean logic, or "the arrangement of circuit elements (as in a computer) needed for computation; also: the circuits themselves". (Merriam-Webster's Collegiate Dictionary definition of logic.) Therefore, it is respectfully submitted that the use of the term "logic" is not indefinite in claim 7 and 59 and therefore, these claims are allowable under 35 USC § 112, second paragraph.

### 3. Claim Rejections Under 35 USC § 251.

Claims 1-74 have been rejected under 35 USC § 251 on the basis that in the parent case (08/680,490) indicates that highlighted portions of claims 1 and 38 (which were attached to the Official Action) were the reasons that the claim was allowed and that Applicants "surrendered" claiming the invention of a scope that lacks such limitations. MPEP section 1412.02 is cited for the proposition that all reissue claims must retain those limitations. Reconsideration of this rejection is respectfully requested.

The reissue of patents is provided for under 35 USC § 251, which states:

Whenever any patent is, through error, without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue...

The position taken by the office in rejecting claims 1-74 appears to be based upon the "recapture rule" by which subject matter that is intentionally surrendered during prosecution in order to obtain an allowance, cannot be construed as an error, such that "the recapture rule, therefore, prevents a patentee from regaining through reissue subject matter that he surrendered in an effort to obtain allowance of the original claims." Ball Corp v. United States, 729 F2d 1429 (Fed. Cir. 1984) (emphasis added); In re Clement 131 F3d 1464, 1468 (Fed. Cir. 1997). As recognized by the Federal Circuit in In re Clement, application of the recapture rule to reissue claims is viewed under a two step test:

- Determine whether and in what "aspect" the reissue claims are broader than the patent claims; and
- 2. Determine whether the broader aspects of the reissue claims relate to surrendered subject matter.

# <u>In re Clement</u>, 131 F3d at 1468-69.

In order to decide whether the recapture rule should apply, therefore, a determination first must be made as to whether the applicant "surrendered the subject matter of the cancelled or amended claim." See id. To make this determination of whether an applicant surrendered particular subject matter, the Federal Circuit has directed that the focus be on the prosecution

history "for arguments and changes to the claims made to overcome a prior art rejection." In re, Clement, 121 F2d at 1468 – 69; citing Mentor Corp. v. Coloplast, Inc., 998 F2d 992 (Fed Cir. 1993) (emphasis added). This language clearly indicates that there must have been some action or "effort to obtain allowance" of the claims by the patentee(s) during prosecution in response to a prior art rejection to have caused or raised a surrender of subject matter claimed in the original application. Further, as explicitly recognized by the Federal Circuit, even in cases where amendments are made, "the recapture rule does not apply where there is no evidence that [Seattle Box's] amendment of the [its] originally filed claims was in any sense an admission that the scope of that claim was not in fact patentable." Mentor, 998 F2d at 995, citing Seattle Box Company, Inc. v. Industrial Crating & Packing, Inc., 731 F2d 818 (Fed Cir. 1984) (emphasis added).

In the present case, however, there was <u>no action by the patentee or its attorney</u>, i.e., no amendments made or claims cancelled, by which it should be considered to have surrendered or given up subject matter now being claimed. In fact, there is essentially no prosecution history here as this case was prosecuted with a first action allowance. Consequently, as discussed with Examiner Jordan, since there is no prosecution history, and thus, there were <u>no</u> amendments or any changes made to the claims to delete or cancel any subject matter now sought to be covered in the present application for reissue, there can be no surrender of subject matter and therefore the recapture rule cannot and <u>does not apply</u>.

Under the prior rules regarding reissues, one of the recited reasons or bases to support a reissue application was that the applicant and/or his attorney failed to appreciate the scope of the invention. This clearly is the case in the present application where the claims were filed with

unnecessary limitations such that less was claimed than the applicants had a right to claim and then were allowed without any further comment or action by applicants. It was not until some time after the issuance of the claims of the patent that it came to the attention of the assignee of record that the claims as filed were narrower than the patentee had a right to claim. Thus, the applicants should not be held to have surrendered subject matter simply because their application was filed with unnecessarily limited claims and neither they or the Office did anything to affirmatively limit or surrender specific subject matter of the claims. To do so would seemingly bar the reissue of any application, which is not the purpose of the recapture rule.

It is respectfully submitted, therefore, that, as discussed with Examiner Jordan, the applicants should not be unduly restricted by the unwarranted application of the recapture doctrine where there is no prosecution history and no actions were taken by the applicants or their attorney to affirmatively give up or surrender subject matter that is now sought to be covered by the claims simply because the scope of the invention was not recognized at the time of filing of the application. Accordingly, the rejection of claims 1 – 74 under 35 USC § 251 should be withdrawn.

## 4. Claim Rejections Under 35 USC § 102

Claims 1, 7 - 9, 11 - 13, 21, 25, 28, 32, 35, 38, 40, 42 - 43, 45 - 54, 57, 59 - 67, and 69 - 74 have been rejected under 35 USC § 102(b) as being anticipated by <u>Harthcock</u>. Similarly, claims 38, 40, 42 - 43, 45, 47, 51, 53, 57, 59 - 60, 62, 64 and 70 - 74 have been rejected under 35 USC § 102(b) as being anticipated by <u>Johnson</u>, et al. Applicants respectfully request reconsideration.

The Harthcock patent is directed to a personal weapon system comprising a microprocessor control "blow forward" handgun. This system appears to be primarily directed to the compilation and recording of information for display on an LCD display screen and for recording information which is time, date, number of rounds fired, and other information for crime lab analysis, and further for programming a desired trigger pressure. Harthcock does include a series of sensors, including a sensor for sensing the breech position of a firearm, i.e., open or closed, which breech sensor is used as a means of determining if the gun is physically able to fire. Harthcock does not, however, appear to disclose a system control that actively monitors the firearm upon receiving a trigger signal to monitor a series of pre-programmed conditions or parameters of the firearm and thereafter isolate and prevent an electrically conductive firing pin from receiving power from a voltage source from the detection or failure of any one of the preprogrammed conditions or parameters. Thus, it does not appear that the microprocessor or control processor of Harthcock performs diagnostic type functions as in the claimed invention.

In addition, the control processor 31 of <u>Harthcock</u> has been recited by the Official Action as corresponding to the switch isolation means recited by the claims, with further reference being made to Column 4, Lines 59 – 63 of <u>Harthcock</u> as disclosing "isolating a firing pin from the voltage source upon occurrence of the failure of firing components." Applicants respectfully disagree and submit that the claimed control system is not found in <u>Harthcock</u>. The purpose of the <u>Harthcock</u> control processor appears to be directed toward the storage of user data and the processing of a trigger pull force, as discussed at Column 3, Lines 3 – 35 and Column 5, Lines 3 – 59 of <u>Harthcock</u>. It further appears that the control processor of Harthcock will still

generate a firing pulse that is transmitted to power frequency generator 49 (Fig. 3) even if the grip safety sensors 51 and 52 do not indicate that the firearm is being properly held.

As to the passage of <u>Harthcock</u> cited for "isolating the firing pin from the voltage source", this passage does not relate to the detection of a firing component of the firearm. Instead, this passage relates to stopping the transmission of the firing pulse <u>if the breech of the firearm is open</u>, wherein a magnet 23 is not directly over a hall-effect transistor 22, indicating an open breech condition. It appears that this is the only condition under which the weapon control processor 31 of <u>Harthcock</u> will not allow a firing signal to be generated. Thus, <u>Harthcock</u> fails to teach a electronic firearm having a system control means that monitors, controls, and coordinates distribution of power to the firing pin, which includes a switching means for preventing power from the voltage supply from reaching the firing pin upon the occurrence of failure of any preprogrammed condition or parameter for firing the firearm.

It is accordingly respectfully submitted that <u>Harthcock</u> fails to teach the construction for an electronic firearm and method of firing a round of ammunition from an electronic firearm as recited in claims 1, 7 – 9, 11-13, 21, 25, 28, 32, 35, 38, 40, 42 – 43, 45 – 54, 57, 59 – 67, and 69 – 74. Therefore, it is respectfully requested that the rejection of these claims under 35 USC § 102(b) as being anticipated by <u>Harthcock</u> be withdrawn.

With regard to the rejection of the claims based upon the <u>Johnson</u>, et al. reference, it initially should be pointed out that <u>Johnson</u>, et al. <u>does not disclose an electronic firearm</u>. Instead, <u>Johnson</u>, et al. discloses an electronic set trigger for actuating a solenoid, which engages the "normal mechanical linkage" or mechanical firing mechanism for a rifle in order to fire a percussion initiated round of ammunition. Thus, Johnson, et al. fails to teach an electronic

firearm or a method for firing electrically actuated ammunition, including monitoring a sequence of operative conditions of a firearm, sending a signal to a system control when a trigger is actuated, and preventing power from reaching the firing pin upon failure of any firing components or detection of a preprogrammed condition for the firearm. In fact, it does not even appear that <u>Johnson</u>, et al. has a system control as claimed which would monitor a sequence of operative conditions for the firearm. Instead, <u>Johnson</u>, et al. simply has a trigger switch that generates a trigger pulse when closed, which trigger pulse is communicated directly to the solenoid, which in turn releases the mechanical firing mechanism of the rifle. <u>Johnson</u>, et al. therefore fails to teach the construction of an electronic firearm and method of firing a round of ammunition in an electronic firearm and method of firing a round of ammunition in an electronic firearm as taught by the claims as currently pending.

It is accordingly respectfully submitted that <u>Johnson</u>, et al. does not anticipate claims 38, 40, 42 – 43, 45, 47, 51, 53, 57, 59 – 60, 62, 64 and 70 – 74, and therefore the rejection of these claims under 35 USC § 102(b) as being anticipated by Johnson, et al. should be withdrawn.

## G. Conclusion

Applicants respectfully submit that the claims now pending in the present Application for Reissue Patent, including pending original claims 1-9 and 11-40, as now amended, and pending new claims 41-74, are presently allowable. Applicants therefore respectfully request an early allowance of claims 1-9 and 11-74.

ATLANTA #221389

Should the examiner have any questions or comments regarding the Application for Reissue Patent or the preliminary amendments made herein and above, the examiner is invited and requested to contact the undersigned attorney at the address and telephone number listed below.

Respectfully submitted,

D. Scott Sudderth

Registration No.: 34,026

WOMBLE CARLYLE SANDRIDGE & RICE

One Atlantic Center 1201 West Peachtree Street Suite 3500 Atlanta, Georgia 30309 (404) 782-7000 (770) 870-8173 (fax)

<u>Certificate of Express Mailin</u>	iling	<u>Mai</u>	press	Ex	of	cate	<u>tifi</u>	<u>Cer</u>	<u>(</u>
--------------------------------------	-------	------------	-------	----	----	------	-------------	------------	----------

I hereby certify that this document is being deposited as Express Mail in an envelope addressed a Assistant Commissioner for Patents, Washington D.6			
20231-0001 on	Express Mail No.		
	٠.		